### **REMARKS**

Claims 1-27 are pending in the application. Claim 9 has been amended to improve readability. Favorable reconsideration of the application, as amended, is respectfully requested.

## I. REJECTION OF CLAIMS 1, 7, 10-17 AND 27 UNDER 35 USC §103(a)

Claims 1, 7, 10-17 and 27 are rejected under 35 USC §103(a) based on Zhang in view of Ohtani et al. This rejection is respectfully traversed for at least the following reasons.

### i. Claim 1

Claim 1 defines an active matrix device as follows:

1. An active matrix device comprising an array of picture elements, each of which comprises an image element, a first charge storage element connected to the image element, and a first semiconductor switch for connecting a data line to the first charge storage element and the image element, characterised in that each picture element comprises a second charge storage element and a second semiconductor switch switchable independently of the first switch to connect the second charge storage element to the first charge storage element and the image element so as to increase the charge storage capacity.

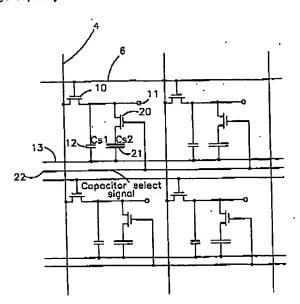


Fig. 6 of Present Application

As illustrated above, Fig. 6 taken from the present application exemplifies an active matrix device in accordance with the present invention. The specification describes how an aspect of the present invention, as recited in claim 1 above, is the provision of a second semiconductor switch 20 which is *switchable independently* of the first semiconductor switch 10. Such independently switchable second semiconductor switch 20 serves to connect the second charge storage element 21 to the first charge storage element 12 *in order to increase the charge storage capacity*.

#### ii. Ohtani et al.

Regarding claim 1, the Examiner relies on Zhang as teaching a display with switch elements connecting a data line to a capacitor and image element. The Examiner correctly notes that Zhang does not teach a switch connecting first and second capacitors as recited in claim 1. However, the Examiner relies on Ohtani et al. as purportedly teaching a second switch with first and second capacitors as recited in claim 1.

The Examiner points to claim 2 and column 2, lines 6-10 of Ohtani et al. as purportedly teaching such a second switch which is switchable independently of the first switch as recited in claim 1. However, applicants respectfully submit that the cited text in Ohtani et al. does not provide any indication whatsoever of a second switch for each pixel which is independently switchable from the first switch and serves to switch in/out the second charge storage element to increase the charge storage capacity. Rather, Ohtani et al. relates to a manner of manufacturing a display device using different types of masks, etc.

Regarding claim 2 to which the Examiner refers, the claim does refer to first and second capacitors. However, there is no teaching or suggestion of a second switch for each pixel which is independently switchable from the first switch as recited in claim 1. Nor is there any teaching or suggestion of such a second switch serving to switch in/out the second capacitor to increase the charge storage capacity.

As for Column 2, lines 6-10 of Ohtani et al., the reference simply indicates that an object of the invention is to provide an active matrix type display device having a

sufficient auxiliary capacitance and a high aperture ration. Again, however, there is no teaching or suggestion of a second switch for each pixel which is independently switchable from the first switch as recited in claim 1. Nor is there any teaching or suggestion of such a second switch serving to switch in/out the second capacitor to increase the charge storage capacity.

Accordingly, applicants respectfully submit that the Examiner has not provided even a *prima facie* basis for the obviousness rejection. None of the references have been shown to teach or suggest a second switch for each pixel which is independently switchable from the first switch as recited in claim 1. Nor has there been shown any teaching or suggestion of such a second switch serving to switch in/out the second capacitor to increase the charge storage capacity as recited in claim 1. In the absence of any such teaching, there is no basis for the rejection.

Furthermore, the Examiner provides as the motivation for combining the teachings of Zhang and Ohtani et al. the desire to provide a high aperture ratio (i.e., increase aperture ratio). On the other hand, the present application discusses how the addition of a second switch and second charge storage element in accordance with the invention can reduce aperture ratio. This of course is exactly opposite to the teachings of Ohtani et al. Hence, one cannot say it would be obvious to make changes to the device in Zhang in view of Ohtani et al. in order to result in the claimed invention. The modifications necessary for the claimed invention tend to reduce aperture ratio, not increase aperture ratio as desired in Ohtani et al..

In summary, neither of the references teach a second switch which is switchable independently of the first and serves to connect the second charge storage element in order to increase charge storage capacity as recited in claim 1. Moreover, the motivation for combining the teachings of the two references is flawed as the references teach the exact opposite.

The remaining claims may be distinguished for at least the same reasons as claim 1 from which they depend. Withdrawal of the rejection is respectfully requested.

# II. REJECTION OF CLAIMS 2-6, 8, 9 AND 18-26 UNDER 35 USC §103(a)

Claims 2-6 are rejected under 35 USC §103(a) based on Zhang, Ohtani et al. and Chen et al. Claims 8 and 9 are rejected under 35 USC §103(a) based on Zhang, Ohtani et al. and Maurice. Claim 18-20 are rejected under 35 USC §103(a) based on Zhang, Ohtani et al. and Koifman et al. Claims 21-23 are rejected under 35 USC §103(a) based on Zhang, Ohtani, Koifman et al. and Williams et al. Claim 24 is rejected under 35 USC §103(a) based on Zhang, Ohtani, Koifman et al., Williams et al. and Razdan. Claim 25 is rejected under 35 USC §103(a) based on Zhang, Ohtani, Koifman et al., William et al. and Kusunoki. Claim 26 is rejected under 25 USC §103(a) based on Zhang, Ohtani, Koifman et al., Kusunoki and Hirase et al.

Each of the above claims depends from claim 1 either directly or indirectly. Accordingly, they may be distinguished over the teachings of Zhang and Ohtani et al. for at least the same reasons. Moreover, the remaining references do not make up for the above-discussed deficiencies in Zhang and Ohtani.

As a result, withdrawal of the rejections is respectfully requested.

#### III. CONCLUSION

Accordingly, all claims 1-27 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Serial No.:

10/081,917

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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